## **ABSTRACT**

A magnetic actuator including a mobile magnetic part, a fixed magnetic part, and a mechanism for triggering displacement of the mobile magnetic part relatively to the fixed magnetic part. At least two amagnetic supports, placed in different planes, delimit a gap between them, the fixed magnetic part being integral with at least one of the supports. The supports each have an abutment area for the mobile magnetic part, the abutment area being distinct from the fixed magnetic part. The mobile magnetic part is in levitation in the gap between both supports by magnetic guiding due to the fixed magnetic part when it does not abut against the abutment area of one of the supports. The mobile magnetic part can assume plural stable magnetic positions; in each of these positions, it abuts against a support.